

AMENDMENTS TO THE CLAIMS

1 - 8. (Cancelled)

9. (Currently Amended) ~~The image coding method according to Claim 1,~~ An image coding method of coding an input image, said method comprising:

coding an input image;

generating a bit stream including the coded input image;

generating a decoded image by decoding the coded input image; and

generating a parameter for making the decoded image more closely resemble the input image, based on a frequency component of at least one of the input image and the decoded image,

wherein in said ~~generating the parameter,parameter generation step,~~ the parameter is generated by performing frequency-based filtering on one of the decoded image and the input image and comparing the filtered one of the images with the other.

10. (Currently Amended) The image coding method according to Claim 9,

wherein in said ~~generating the parameter,parameter generation step,~~ the frequency-based filtering is performed using a point spread function,~~as the filtering.~~

11. (Currently Amended) The image coding method according to Claim 9,

wherein in said ~~generating the parameter,parameter generation step,~~ the parameter is generated per image area by comparing the filtered one of the decoded image and the input image with the other on a per image area basis.

12. (Currently Amended) The image coding method according to Claim 9[[1]], further comprising

~~an identification information generation step of~~ generating identification information for identifying processing used for generating the parameter in said generating the parameter,parameter generation step.

13. (Currently Amended) The image coding method according to Claim 9[[1]], further

comprising

~~a multiplexing step of multiplexing the parameter generated in said generating the parameter parameter generation step, into the bit stream generated in said generating the bit stream coding step.~~

14. (Currently Amended) The image coding method according to Claim 9[[1]], further comprising

~~a pre-processing step of performing predetermined pre-processing on the input image, wherein in said coding the input image coding step, an input image on which the predetermined pre-processing has been performed is coded, and ~~and a bit stream is generated,~~ and~~

~~wherein in said generating the parameter parameter generation step, the parameter is generated based on a frequency component of at least one of: the decoded image; and the input image on which the predetermined pre-processing has been performed or an[[the]] input image on which the predetermined pre-processing has not been performed.~~

15. (Currently Amended) The image coding method according to Claim 14,

wherein in said performing the pre-determined pre-processing ~~pre-processing step~~, one of: image size reduction processing; low-pass filtering; and frame rate reduction processing is performed on the input image.

16. (Currently Amended) The image coding method according to Claim 14, further comprising

~~a pre-processing parameter generation step of generating a pre-processing parameter indicating details of the pre-determined pre-processing performed in said performing the pre-determined pre-processing pre-processing step.~~

17 - 22. (Cancelled)

23. (Currently Amended) ~~The image decoding method according to Claim 17, An image decoding method of decoding a coded input image, said method comprising:~~

obtaining a bit stream including the coded input image;
generating a decoded image by decoding the coded input image included in the bit stream;
obtaining a parameter generated based on a frequency component of at least one of the coded input image and the decoded image; and
generating a high quality decoded image that more closely resembles an input image than the decoded image, by applying the parameter to the decoded image,
wherein in said generating the high quality decoded image,~~image quality improvement step,~~ the high quality decoded image is generated by performing, on the decoded image, frequency-based filtering suited for the parameter.

24. (Currently Amended) The image decoding method according to Claim 23,
wherein in said generating the high quality decoded image,~~image quality improvement step,~~ the high quality decoded image is generated ~~by performing filtering~~ using a point spread function[[,]] as the frequency-based filtering.

25. (Currently Amended) The image decoding method according to Claim 23[[17]], further comprising
~~an identification information obtainment step of~~ obtaining identification information for identifying processing used for generating the parameter,
wherein in said generating the high quality decoded image,~~image quality improvement step,~~ the high quality decoded image is generated by applying the parameter to the decoded image according to the processing indicated by the identification information.

26. (Currently Amended) The image decoding method according to Claim 23[[17]],
wherein in said obtaining the parameter,~~parameter obtainment step,~~ the parameter is obtained by separating the parameter from multiplexed information in which the bit stream and the parameter are multiplexed.

27. (Currently Amended) The image decoding method according to Claim 23[[17]], further comprising

~~a post-processing step of performing predetermined post-processing on the decoded image or the high quality decoded image,~~

wherein in said generating the high quality decoded image, ~~image quality improvement step, in the case where the post-processing has been performed on the decoded image in said post-processing step,~~ the high quality decoded image is generated by applying the parameter to the decoded image on which the post-processing has been performed in a case where the predetermined post-processing has been performed on the decoded image in said performing the pre-determined post-processing.

28. (Currently Amended) The image decoding method according to Claim 27,

wherein in said performing the pre-determined post-processing, ~~post-processing step,~~ one of: image size enlargement processing; high-pass filtering; and frame rate increase processing is performed on the decoded image or the high quality decoded image.

29. (Currently Amended) The image decoding method according to Claim 27, further comprising

~~a post-processing parameter obtainment step of obtaining a post-processing parameter indicating details of the~~ predetermined post-processing,

wherein in said performing the pre-determined post-processing, ~~post-processing step,~~ the predetermined post-processing indicated by[[of]] the details is performed. ~~indicated by the post-processing parameter is performed.~~

30. (Currently Amended) An image coding device which codes an input image, said device comprising:

a coding unit operable to code an input image and to generate a bit stream including the coded input image;

a decoded image generation unit operable to generate a decoded image by decoding the coded input image; and

a parameter generation unit operable to generate a parameter for making the decoded image more closely resemble the input image, based on a frequency component of at least one of the input image and the decoded image,[[.]]

wherein said parameter generation unit is operable to generate the parameter by performing frequency-based filtering on one of the decoded image and the input image and comparing the filtered one of the images with the other.

31. (Currently Amended) An image decoding device which decodes a coded input image, said device comprising:

a bit stream obtainment unit operable to obtain a bit stream including the coded input image;

a decoding unit operable to generate a decoded image by decoding the coded input image included in the bit stream;

a parameter obtainment unit operable to obtain a parameter generated based on a frequency component of at least one of the coded input image and the decoded image; and

an image quality improvement unit operable to generate a high quality decoded image that more closely resembles an input image than the decoded image, by applying the parameter to the decoded image₁[[.]]

wherein in said image quality improvement unit is operable to generate the high quality decoded image by performing, on the decoded image, frequency-based filtering suited for the parameter.

32. (Currently Amended) An integrated circuit which codes an input image, said circuit comprising:

a coding unit operable to code an input image and to generate a bit stream including the coded input image;

a decoded image generation unit operable to generate a decoded image by decoding the coded input image; and

a parameter generation unit operable to generate a parameter for making the decoded image more closely resemble the input image, based on a frequency component of at least one of the input image and the decoded image₁[[.]]

wherein said parameter generation unit is operable to generate the parameter by performing frequency-based filtering on one of the decoded image and the input image and comparing the filtered one of the images with the other.

33. (Currently Amended) An integrated circuit which decodes a coded input image, said circuit comprising:

a bit stream obtainment unit operable to obtain a bit stream including the coded input image;

a decoding unit operable to generate a decoded image by decoding the coded input image included in the bit stream;

a parameter obtainment unit operable to obtain a parameter generated based on a frequency component of at least one of the coded input image and the decoded image; and

an image quality improvement unit operable to generate a high quality decoded image that more closely resembles an input image than the decoded image, by applying the parameter to the decoded image,[[.]]

wherein in said image quality improvement unit is operable to generate the high quality decoded image by performing, on the decoded image, frequency-based filtering suited for the parameter.

34. (Currently Amended) A non-transitory computer-readable recording medium having stored thereon a program for coding an input image, wherein, when executed, said program causes~~causing~~ a computer to execute a method comprising:

~~a coding step of coding an input image; [[and]]~~

generating a bit stream including the coded input image;

~~a decoded image generation step of generating a decoded image by decoding the coded input image; and~~

~~a parameter generation step of generating a parameter for making the decoded image more closely resemble the input image, based on a frequency component of at least one of the input image and the decoded image,[[.]]~~

wherein in said generating the parameter, the parameter is generated by performing frequency-based filtering on one of the decoded image and the input image and comparing the filtered one of the images with the other.

35. (Currently Amended) A non-transitory computer-readable recording medium having

stored thereon a program for decoding a coded input image, wherein, when executed, said program causes~~causing~~ a computer to execute a method comprising:

~~a bit stream obtainment step of~~ obtaining a bit stream including the coded input image;
~~a decoding step of~~ generating a decoded image by decoding the coded input image included in the bit stream;

~~a parameter obtainment step of~~ obtaining a parameter generated based on a frequency component of at least one of the coded input image and the decoded image; and

~~an image quality improvement step of~~ generating a high quality decoded image that more closely resembles an input image than the decoded image, by applying the parameter to the decoded image.[][]

wherein in said generating the high quality decoding image, the high quality decoded image is generated by performing, on the decoded image, frequency-based filtering suited for the parameter.